

# OCCUPATIONAL VIOLENCE AND MORBIDITY PATTERN OF COMMERCIAL ROAD TRANSPORT WORKERS IN PORTHARCOURT, RIVERS STATE NIGERIA

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## ABSTRACT

**BACKGROUND:** Commercial road transport workers are frequently exposed to workplace violence (WPV) - an issue of public health concern in literally all occupations involving interactions with members of the public. The study was conducted to determine the prevalence of workplace violence among commercial drivers and conductors in Port Harcourt metropolis, Rivers state Nigeria.

**METHODS:** Following ethical approval, 150 consenting commercial road transport workers were recruited to participate in this cross-sectional study. They responded to previously validated interviewer administered questionnaire which probed socio-demographics, experience of workplace violence and workplace violence reporting. Collected data were analysed using descriptive tools.

**RESULTS:** There was a high prevalence of workplace psychological (85.3%) and physical (60.7%) violence experienced by respondents in the preceding twelve months. The most common perpetrators of physical violence were passengers in 44% of the cases studied and experiences of workplace physical violence took place mainly at the passengers destination especially while the vehicles were in motion and respondents were driving. As much as 71.4% of WPV cases were not reported and only 19.2% of the perpetrators were arrested out of the 80.8% reports that were made to the appropriate authorities.

**CONCLUSION:** The prevalence of workplace violence is high among this occupational group. There is urgent need for passenger-transporter education and application of prescribed penalties for all proven infringements.

**KEYWORDS:** Workplace violence (WPV), commercial drivers, perpetrators.

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## INTRODUCTION

Violence in the workplace may be gradually taking an epidemic dimension in modern developing Africa.<sup>1</sup> Not only is workplace violence increasing in occupations where violence is expected i.e. law enforcement organizations, prisons and psychiatric health facilities, but has become a 'gathering' hazard in almost every occupation involving social interaction with the public.<sup>2</sup>

Commercial road drivers are frequently exposed to a broad range of hazard related to both driving and non-driving tasks.<sup>3</sup> Some of these hazards include; road traffic accidents, musculoskeletal and vibration-related disorders, hot and cold weather exposures, noise from vehicles and the external environment, stress, long work hours, shift work, fatigue and violence while at

work.<sup>4</sup> Their exposure to workplace violence may occur as a result of the nature of their jobs, in which they interact with various members of the public, including individuals who have the tendency to cause harm viz alcoholics, illicit drug users and even armed robbers!

The World Health Organization (WHO) defines violence as the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, mal-development or deprivation.<sup>5</sup> Workplace violence also includes behaviours exhibited by an individual or individuals, within or outside an organization intended to physically and/or psychologically harm worker/workers occurring in a work related context.<sup>6</sup>

Four main types of workplace violence have been described.<sup>7</sup> Type 1 is violence occurring as a result of 'criminal intent' since the violence is committed during a crime by individuals who are not employees of the establishment. No legal business relationship exists

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between the perpetrator and the victim. Type 2 is violence from a 'customer or client' because the violence is committed during service delivery. This type of violence is common in occupational settings, where the perpetrators inflict violence at the service providers. Police officers, prison staff, flight attendants, commercial road drivers and teachers are some examples of employees who may be exposed to this kind of workplace violence. Type 3 is violence following interpersonal or work-related disagreements between current or former employees. It is called horizontal or 'worker-on-worker' violence, for the reason that both the perpetrator and the survivor have an official relationship with the organization.

Type 4 is a spill-over of domestic violence into the workplace. Here, perpetrator has a personal relationship with the employee but not necessarily with the organization.

Categorizing workplace violence has enhanced both communication and research on the subject as well as in the development of programmes for prevention. Other key concepts in workplace violence include: Threatening behaviour (such as shaking fists, destroying property or throwing objects), verbal or written threats (such as expression of intention to inflict harm on an individual), harassment (which includes any behaviour that demeans, embarrasses, humiliates, annoys, or alarms a person and that is known or would be expected to be unwelcome). It also includes words, gestures, intimidation, bullying, or other inappropriate activities. Verbal abuse (swearing, insults or condescending language) and physical attacks (hitting, shoving, pushing or kicking).<sup>8</sup>

Increased levels of concern and public awareness has drawn more interest to psycho-social harm like occupational violence, sexual harassment and bullying at the workplace than the conventional occupational hazards such as physical, chemical, radiological, biological, and ergonomic hazards which workers may be exposed to.<sup>9, 10</sup> Globally, greater than 16 million people are lost to death annually as a result of violence, and violence is the foremost cause of death among individuals aged 15–44 years, accounting for 14% of male and 7% of female mortality in this age range.<sup>11</sup> Between 2003 and 2012 greater than 50% of homicides in the work environment in the United States took place among three job groups. These are; sales and related occupations (28%), protective service occupations (17%), and transportation and material moving occupations (13%).<sup>12</sup> While in Africa, particularly in the health sector, the prevalence of workplace violence ranges between 4–52%.<sup>13</sup> A study conducted in Nigeria on workplace violence in the health sector reported a prevalence of 88.1%,<sup>14</sup> while reports from taxi drivers in

Nigeria from a previous study stated that 27.6% of them had experienced actual physical violence and 52.9% of them had received threats of violence.<sup>15</sup>

Port Harcourt, a city in Rivers state of Nigeria is developing at a fast rate in terms of populace and spatial dimensions. This has resulted in an increased demand on the transport sector. Sadly, the intra-city commercial vehicles and road infrastructures are not increasing and developing at the same pace to meet the mobility needs and standards of the inhabitants. Many of the road inter-sections do not have traffic lights and are not always monitored or controlled by traffic wardens. This expectedly leads to difficulty in passenger commute especially during peak hours when individuals are on their way to and from work. The resultant traffic congestion makes it difficult for passengers to get to their destination in time and this may evoke impatience and annoyance from the passengers who in-turn become aggressive towards the commercial drivers and their conductors. Other factors that could place commercial road transport workers at risk of workplace violence include; long waiting time for aggravated passengers, vehicle overcrowding of passengers, increase in transport fare and use of old rickety vehicles causing discomfort to the passengers.<sup>16</sup> The workers' age, number of years spent in commercial driving, educational status, type of perpetrator and time of the day mostly worked may also influence their risk of experiencing violence in the workplace.

This study was conducted to determine the prevalence of workplace violence against commercial road transport workers in Port Harcourt, Rivers state Nigeria.

## MATERIALS AND METHODS

**Study area and study population:** The study was conducted in Port Harcourt metropolis, the capital of Rivers State, Nigeria with a population of more than 1,255,387.<sup>18</sup> The city lies approximately between longitude 6° 55'E and 7° 55'E and latitude 4° 45' and 5° 10'N of the equator and occupies a land mass of 934sqkm. Public transportation by road within Port Harcourt is provided by buses, minibuses and taxis, owned by the government and private transport companies. Most of the private transport companies are subsistent and hardly registered with the government. Each bus or minibus is run by a driver and a conductor, while each taxi is driven by a driver only. The conductors are assistants to bus drivers. They collect bus fares just before the passenger drops off the bus and they help in opening and closing the vehicle doors. Commercial motor vehicle drivers are registered in motor parks which are large spaces reserved for commercial vehicles waiting to be filled with

passengers without causing obstruction to flow of traffic. Both interstate and intrastate transporters use the motor parks. When buses, mini-buses or taxis get filled, the passengers are dropped at their preferred stop-off zones along the road. Passengers pay the transport fare shortly before getting off the vehicle or after. The study sites included seven major government-owned motor parks in Port Harcourt which included Government motor parks and 3 private motor parks which are the major registered parks in Port Harcourt.<sup>19</sup>

**Study design and sampling:** This was descriptive cross sectional study conducted in May 2015 with 150 consenting respondents (inclusive of margin for non-response) and selected via multistage sampling. First, 3 motor parks were selected by simple random sampling using a table of computer generated random numbers from the list of government registered motor parks. Then, systematic random sampling was applied to select drivers and conductors from each selected motor park. A list of registered drivers and conductors were obtained from the park chairman. The sampling fraction was calculated by dividing the sample size required from each park by the total number of registered drivers in each of the parks. This gave a sampling fraction of 2, and every second driver from the list in each park was chosen until the sample size required for each park was completed. The number of drivers to be selected was then calculated using proportionate to size sampling. The proportion of drivers sampled from each park was obtained by the dividing the number of drivers in that park by the total number of registered drivers in the three parks multiplied by the calculated sample size.

**Study population:** The study population included commercial bus drivers and conductors as well as taxi drivers operating from registered government motor parks in Port Harcourt and running intra-city routes within the metropolis. Commercial drivers are members of the National Union of Road Transport Workers (NURTW), which has an organizational structure consisting of a state chairman and other officers. The smallest units are road transport workers in motor parks, each with its unit chairman. Their ages ranged from 21 to 60 years and all respondents had been engaged in commercial driving for more than twelve months.

**Study instruments and data collection:** The study instrument was adapted and modified from a previously validated violence incident questionnaire.<sup>20</sup> It consisted of; socio-demographic characteristics, experiences of workplace violence and risk factors of workplace. The questionnaire was interviewer administered and data was collected under the

supervision of the researchers by 3 trained research assistants between the hours of 9a.m and 3pm each day which were not peak times for loading passengers hence selected respondents had time for the data collection.

**Data analysis:** Data was entered, edited and analysed using SPSS for windows version 17.0. The data were presented using tables.

**Ethical considerations:** Ethical approval was obtained from the School of Medicine Research Ethics Committee, Cardiff University. Permission was also obtained from the Chairman of each selected park following presentation of the ethical approval letter. An oral presentation of the content of the participant information sheet by research assistant was done for each respondent prior to data collection. A face-to face interview was done for appropriate data collection. Confidentiality and privacy was respected during the course of interview, most drivers and conductors were interviewed in their vehicles before the turn of their vehicles to load passengers.

**Limitations:** All reports of WPV experiences were retrospective and therefore subject to recall bias however only experiences in the past twelve months were required for this study.

**Conflict of interest:** None to declare

## RESULT

**TABLE 1: Socio-demographic characteristics of respondents**

Variables	Frequency (n=150)	Percentage (%)
<b>Age group (years)</b>		
Below 20	0	0
21-30	35	23.3
31-40	71	47.3
41-50	22	14.7
51-60	22	14.7
Above 60	0	0
<b>Total</b>	<b>150</b>	<b>100</b>
<b>Gender</b>		
Male	148	98.7
Female	2	1.3
<b>Total</b>	<b>150</b>	<b>100</b>

<b>Educational level completed</b>		
None	9	6.0
Primary	32	21.3
Junior secondary	31	20.7
Senior secondary	73	48.7
Tertiary	5	3.3
<b>Total</b>	<b>150</b>	<b>100</b>
<b>Number of years engaged in commercial driving</b>		
1 - 5 years	99	66
6 -10 years	36	24
<b>11 – 15 years</b>	<b>8</b>	<b>5.3</b>
<b>16 – 20 years</b>	<b>7</b>	<b>4.7</b>
<b>Total</b>	<b>150</b>	<b>100</b>
<b>Category of commercial driving</b>		
Taxi driver	14	9.3
Bus driver	85	56.7
Conductor (bus driver assistant)	34	22.7
Truck driver	17	11.3
<b>Total</b>	<b>150</b>	<b>100</b>
<b>Time of the day mostly worked</b>		

**TABLE 2: Prevalence of Workplace physical violence**

Variables	Frequency (n=150)	Percentage (%)
<b>Experience of physical violence in the last 12 months</b>		
Yes	91	60.7
No	59	39.3
<b>Was there use of weapon?</b>		
Yes	28	18.7
No	63	42.0
<b>Who was the perpetrator?</b>		
Passenger	66	44.0
Robbers	12	8.0
Others	13	8.7
<b>Time of occurrence of physical violence</b>		
7am-before 1pm	40	26.7
1pm –before 6pm	43	28.7
6pm – before 12am	8	5.3
<b>Where did the incident occur</b>		
At the park	9	6.0
At passengers' destination	45	30.0
While driving	37	24.7

**TABLE 3: Prevalence of workplace psychological violence**

Variables	Frequency (n=150)	Percentage (%)
<b>Experience of psychological abuse in the last 12 months</b>		
	88	58.7
Verbal abuse	29	19.3
Bullying	11	7.3
Tribal harassment	22	14.7
None		

**TABLE 4: Report of WPV incident**

Variable	Frequency (n=91)	Percentage (%)
<b>Was the incident reported?</b>		
No	65	71.4
Yes	26	28.6
<b>Total</b>	<b>91</b>	<b>100.0</b>
<b>Who was the report made to?</b>		
The Park chairman	9	34.6
The Police	17	65.4
<b>Total</b>	<b>26</b>	<b>100.0</b>

**TABLE 5: Consequences for the perpetrator**

Variable	Frequency (n=26)	Percentage (%)
<b>What were the consequences for the attacker?</b>		
No consequence	21	80.8
Arrests were made	5	19.2
<b>Total</b>	<b>26</b>	<b>100.0</b>

## DISCUSSION

The 60.7% prevalence of physical violence experienced by respondents over a 12-month period is comparable to data from the transport sector conducted by other researchers in developed countries who reported the prevalence of workplace violence among road transport workers to range between 19-70%.<sup>21,22,23</sup> Findings of this study indicate that among those who experienced physical violence, 18.7% of them involved the use of weapons. This result is higher than the 16.7% prevalence involving use of weapons among those who experienced physical violence in the Mozambique study in 2011.<sup>24</sup> This indicates a higher level of aggression from perpetrators of workplace violence in the study area. The most common perpetrators of physical violence were passengers in 44% of the events. This is lower than the prevalence of 51.6% passenger initiated violence observed in the study done by Couto MT.<sup>24</sup> However it indicates a higher prevalence of Type II workplace violence occurring in this study, in which violence is initiated by the client or customer and inflicted on the service-provider. The second common perpetrators of violence were 'others', which occurred in 8.7% of the cases and included individuals or people who were known by the drivers or had a personal relationship with the drivers, such as their colleagues, friends or relatives. The result therefore indicates that Type II classification of workplace violence is most prevalent in this occupational setting; followed by the Type IV workplace violence and then Type I class of workplace violence which occurred in 8% of the cases.

Findings from this study show that experiences of workplace physical violence took place mainly at the passengers destination and while respondents were driving. Only a few incidents took place at the parks and this is comparable with findings from studies conducted by other researchers.<sup>24, 25</sup> Here, societal risk factors may play a role in influencing the occurrence of WPV. If violence is a usual occurrence at certain drop off zones or destinations (as confirmed by 58% of the respondents), the perpetrators may find it easier to exhibit violent tendencies at their destinations. This may be the reason for the high occurrence of WPV at the passengers' destination in this study.

The present study identified that 85.3% of the respondents had experienced psychological abuse while working in the last 12 months, which includes 58.7% verbal abuse, 19.3% bullying and 7.3% tribal harassment. This result gives a higher overall prevalence of psychological abuse compared to findings from previous studies done in Australia (75%) and Nigeria (52.9%).<sup>14,26</sup> This high prevalence of psychological abuse in the occupational setting can cause a serious distraction of drivers while working,

placing them at a risk of having accidents due to lack of concentration.

The study also indicates a high prevalence of under-reporting cases of WPV (71.4%). Reasons for these observations maybe lack of believe or trust in the law enforcement agencies to make an arrest before the assailant escaped or that no legal charges would be made to the perpetrators. This is evidenced by the fact that only 19.2% of the perpetrators were arrested out of the 80.8% reports that were made to both the police and the motor park chairmen. This is similar to reports from a study conducted by Gallant-Roman<sup>27</sup> who observed that under-reporting prevents proper follow-up in the trends of workplace violence events in any organization over time and can lead to poor identification of the risk factors and perpetrators of violence in the workplace.

## CONCLUSION

There is increased vulnerability of workers in the transportation sector in Port Harcourt to both physical and psychological workplace violence especially Type II WPV. Target programmes on WPV awareness and prevention, proper orientation, training and retraining at regular intervals should be provided for employees in this occupation especially workers in the younger age group (21-30), those with fewer number of working years (1-5 years), the less educated drivers, drivers and conductors who are new to the occupation, since they may be more vulnerable to experiencing violence in the workplace.

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